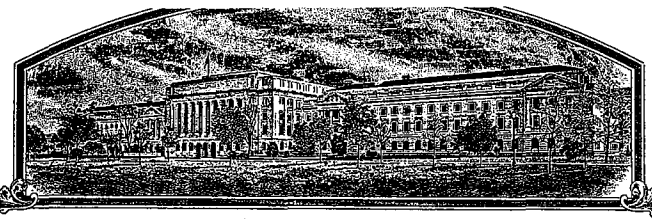

No. 200000250

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pioneer Hi-Bred International, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE , OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'PH3PG'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fifth day of February, in the year two thousand two.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions.* FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
Pioneer Hi-Bred International, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

3. VARIETY NAME
PH3PG

4. ADDRESS (*Street and No. or RFD No., City, State and Zip Code, and Country*)
7301 NW 62nd Avenue
P.O. Box 85
Johnston, IA 50131-0085

5. TELEPHONE (*Include area code*)
515/270-4051

6. FAX (*Include area code*)
515/253-2125

FOR OFFICIAL USE ONLY
PVPO NUMBER
200000250

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (*corporation, partnership, association, etc.*)
Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION)
IOWA

9. DATE OF INCORPORATON
March 5, 1999

FILING DATE
5/17/00

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION (FIRST PERSON LISTED WILL RECEIVE ALL PAPERS)
Steven R. Anderson
Research and Product Development
P.O. Box 85
Johnston, IA 50131-0085

FEES RECEIVED
FILING & EXAMINATION FEES: $ 2450.00
DATE 5-17-00
CERTIFICATION FEE: $ 320.00
DATE 11/10/02

11. TELEPHONE (*Include area code*)
515/270-4051

12. FAX (*Include area code*)
515/253-2125

13. E_MAIL
ANDERSONS@PHIBRED.COM

14. CROP KIND NAME (*Common name*)
CORN

15 GENUS AND SPECIES NAME OF CROP
Zea Mays

16. FAMILY NAME (*Botanical*)
Gramineae JRM 4/11/01

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ Yes ☒ No

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (*Follow instructions on reverse*)
- a. ☒ Exhibit A. Origin and Breeding History of the Variety
- b. ☒ Exhibit B. Statement of Distinctness
- c. ☒ Exhibit C. Objective Description of the Variety
- d. ☒ Exhibit D. Additional Description of the Variety (*Optional*)
- e. ☒ Exhibit E. Statement of the Basis of the Owner's Ownership
- f. ☒ Voucher Sample (*2500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository*)
- g. ☒ Filing and Examination Fee ($2,450), made payable to "Treasurer of the United States" (*Mail to Plant Variety Protection Office*))

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act)
☐ YES (If "yes", answer items 20 and 21 below) ☒ NO (If "no", go to Item 22)

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO

21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U.S. OR OTHER COUNTRIES?
☒ YES ☐ NO

IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (*Please use space indicated on reverse*)

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?
☐ YES ☒ NO

IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (*Please use space indicated on reverse.*)

24. The owner(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and results in penalties.

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
		Steven R Anderson	
NAME (*Please print or type*)		NAME (*Please print or type*)	
		Steven R. Anderson	
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
		Senior Research Associate	5/12/2000

S&T-470 (06-98DESIGNED BY THE Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (03-96) which is obsolete. (*See reverse for instructions and information collection burden statement)*

2000002507

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A,B,C,E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety sy lrsdy 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in a approved public repository; (4) check drawn on a U.S. bank for $2,450 ($300 filing fee and $2,150 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of $300 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office
Telephone: (301)504-5518
FAX: (301)504-5291
Homepage: http://www.ams.usda.gov/science/pvp.htm

ITEM

18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.

18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens of photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

18c. Exhibit C forms are available from the PVPO for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant disease resistance, etc.

18e. Section 52(5) of the Act required applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

19. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of* certified seed), the applicant may NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, applicant may change the choice. *(See Regulations and Rules of Practice, Section 7.103).*

22. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.

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22. CONTINUED FROM FRONT (*Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.*)

Nov. 1, 1999; United States, Canada

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23. CONTINUED FROM FRONT (*Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).*

NOTES; It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.)*

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Exhibit A. Origin and Breeding History

Pedigree: PHKM5<2PHFA5)C7911X

Pioneer Line PH3PG, *Zea mays L.*, a dent-like corn inbred, was developed by Pioneer Hi-Bred International, Inc. from the single cross hybrid PHKM5 (Certificate No. 9400097) X PHFA5 (PVP Certificate No. 9300107) using the backcrossing and pedigree method of plant breeding. Varieties PHKM5 and PHFA5 are proprietary inbred lines of Pioneer Hi-Bred International, Inc. Selfing was practiced (after 2 backcrossing generations) for 5 generations using pedigree selection. During line development, crosses were made to inbred testers for the purpose of estimating the line's combining ability. Yield trials were grown at Grand Forks, North Dakota, as well as other Pioneer research locations. After initial testing, additional hybrid combinations have been evaluated and subsequent generations of the line have been grown and hand-pollinated with observations again made for uniformity.

Variety PH3PG has shown uniformity and stability for all traits as described in Exhibit C - "Objective Description of Variety". It has been self-pollinated and ear-rowed 5 generations with careful attention paid to selection criteria and uniformity of plant type to assure genetic homozygousity and phenotypic stability. The line has been increased both by hand and in isolated fields with continued observations for uniformity and stability for 4 generations during the final stages of inbred development and seed multiplication. Very high standards for genetic purity have been established morphologically using field observations and electrophoretically using sound lab molecular marker methodology.

No variant traits have been observed or are expected in PH3PG.

The criteria used in the selection of PH3PG were yield, both per se and in hybrid combinations; late season plant health, grain quality, stalk lodging resistance, and kernel size, especially important in production. Other selection criteria include: ability to germinate in adverse conditions; number of tillers, especially important in production because having numerous tillers increases hybrid production costs spent on detasseling; disease and insect resistance; pollen yield and tassel size.

Exhibit A: Developmental history for PH3PG

Season/Year Pedigree Grown	Inbreeding Level of Pedigree Grown
PHKM5, PHFA5	F0
Summer 1991 PHKM5/PHFA5	F1
Summer 1992 PHKM5<2PHFA5	BC1F1
Summer 1993 PHKM5<2PHFA5)C7	BC1F2
Summer 1994 PHKM5<2PHFA5)C79	BC1F3
Winter 1995 PHKM5<2PHFA5)C791	BC1F4
Summer 1996 PHKM5<2PHFA5)C7911	BC1F5
Winter 1996 PHKM5<2PHFA5)C79112	BC1F6
Seed Bulk PHKM5<2PHFA5)C7911X	BC1F6

*PH3PG was selfed and ear-rowed from BC1F2 through BC1F6 generation.
#Uniformity and stability were established from BC1F3 through BC1F6 generation and beyond when seed supplies were increased.

Exhibit B: Novelty Statement

Variety PH3PG mostly resembles Pioneer Hi-Bred International, Inc. proprietary inbred line PHKM5 (PVP Certificate No. 9400097). The data in Tables 1A and 1B are from paired comparisons collected primarily in Johnston and Ankeny, IA. The data in Table 2 are from paired comparisons at multiple locations grown primarily in the adapted growing area of PH3PG. The traits collectively show measurable differences between the two varieties.

Variety PH3PG has wider cob diameter (18.2 mm vs 15.1 mm) than variety PHKM5 (Table 1A, 1B).

Variety PH3PG has more ear row number (15.0 vs 12.3) than variety PHKM5 (Table 1A, 1B).

Variety PH3PG has heavier ear weight (70.7 g vs 46.2 g) than variety PHKM5 (Table 1A, 1B).

Variety PH3PG reaches 50% silking (GDUSLK) sooner (1098 GDU's vs 1149 GDU's) than variety PHKM5 (Table 2).

Variety PH3PG has taller plant height (PLTHT) (186.7 cm vs 165.9 cm) than variety PHKM5 (Table 2).

SMS 12/13/01

A t-test was used to compare differences between means and the appropriate parameters have been included. It is difficult to collect standard deviations for table 2 due to the way the historical data was stored.

Exhibit B Novelty Statement Tables

Exhibit B: Novelty Statement Tables

Table 1A: Data from Johnston, IA in 1997, 1998 and 1999 are supporting evidence for differences between PH3PG and PHKM5. Locations had different environmental conditions. Environments had different planting dates and were in different fields.

Station	Loc	Year	Traits	Variety-1	Variety-2	Count-1	Count-2	Mean-1	Mean-2	Mean Diff	StdDeviation-1	StdDeviation-2	StdError-1	StdError-2	DF Pooled	t-Value Pooled	Prob (2-tail) Pooled
AD	20N	1997	cob diameter (mm)	PH3PG	PHKM5	5	5	16.8	13.4	-3.4	0.837	0.548	0.374	0.245	8	7.60	0.000
JH	21	1997	cob diameter (mm)	PH3PG	PHKM5	5	5	17.4	13.6	-3.8	1.140	1.140	0.510	0.510	8	5.27	0.001
AD	20N	1998	cob diameter (mm)	PH3PG	PHKM5	5	5	19.4	16.8	-2.6	1.140	0.447	0.510	0.200	8	4.75	0.001
JH	95	1998	cob diameter (mm)	PH3PG	PHKM5	5	5	20.4	15.8	-4.6	0.894	0.447	0.400	0.200	8	10.29	0.000
AD	20N	1999	cob diameter (mm)	PH3PG	PHKM5	5	5	18.4	15.8	-2.6	0.548	1.095	0.245	0.490	8	4.75	0.001
JH	Y212	1999	cob diameter (mm)	PH3PG	PHKM5	5	5	17.0	15.0	-2.0	1.225	0.707	0.548	0.316	8	3.16	0.013
AD	20N	1997	ear row number	PH3PG	PHKM5	5	5	15.6	13.6	-2.0	1.673	0.894	0.748	0.400	8	2.36	0.046
JH	21	1997	ear row number	PH3PG	PHKM5	5	5	15.6	12.8	-2.8	1.673	1.789	0.748	0.800	8	2.56	0.034
AD	20N	1998	ear row number	PH3PG	PHKM5	5	5	14.8	11.6	-3.2	1.789	0.894	0.800	0.400	8	3.58	0.007
JH	95	1998	ear row number	PH3PG	PHKM5	5	5	13.6	10.4	-3.2	0.894	0.894	0.400	0.400	8	5.66	0.000
AD	20N	1999	ear row number	PH3PG	PHKM5	5	5	15.6	12.8	-2.8	1.673	1.095	0.748	0.490	8	3.13	0.014
JH	Y212	1999	ear row number	PH3PG	PHKM5	5	5	14.8	12.4	-2.4	1.789	0.894	0.800	0.400	8	2.68	0.028
AD	20N	1997	ear weight (g)	PH3PG	PHKM5	5	5	79.2	53.2	-26.0	12.617	10.849	5.643	4.852	8	3.49	0.008
JH	21	1997	ear weight (g)	PH3PG	PHKM5	5	5	86.2	50.2	-36.0	14.394	4.658	6.437	2.083	8	5.32	0.001
AD	20N	1998	ear weight (g)	PH3PG	PHKM5	5	5	61.6	50.0	-11.6	18.649	5.568	8.340	2.490	8	1.33	0.219
JH	95	1998	ear weight (g)	PH3PG	PHKM5	5	5	70.4	33.6	-36.8	7.232	5.941	3.234	2.657	8	8.79	0.000
AD	20N	1999	ear weight (g)	PH3PG	PHKM5	5	5	60.8	47.4	-13.4	9.524	7.701	4.259	3.444	8	2.45	0.040
JH	Y212	1999	ear weight (g)	PH3PG	PHKM5	5	5	66.2	42.6	-23.6	7.120	3.209	3.184	1.435	8	6.76	0.000

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Table 1B: Summary data from Johnston, IA across environments in 1997, 1998 and 1999 are supporting evidence for differences between PH3PG and PHKM5. Locations had different environmental conditions.

Year	Traits	Variety-1	Variety-2	Count-1	Count-2	Mean-1	Mean-2	Mean Diff	StdDeviation-1	StdDeviation-2	StdError-1	StdError-2	DF Pooled	t-Value Pooled	Prob (2-tail) Pooled
1997	cob diameter (mm)	PH3PG	PHKM5	10	10	17.1	13.5	3.6	0.994	0.850	0.314	0.269	18	8.70	0.000
1998	cob diameter (mm)	PH3PG	PHKM5	10	10	19.9	16.3	3.6	1.101	0.675	0.348	0.213	18	8.82	0.000
1999	cob diameter (mm)	PH3PG	PHKM5	10	10	17.7	15.4	2.3	1.160	0.966	0.367	0.306	18	4.82	0.000
1997	ear row number	PH3PG	PHKM5	10	10	15.6	13.2	2.4	1.578	1.398	0.499	0.442	18	3.60	0.002
1998	ear row number	PH3PG	PHKM5	10	10	14.2	11.0	3.2	1.476	1.054	0.467	0.333	18	5.58	0.000
1999	ear row number	PH3PG	PHKM5	10	10	15.2	12.6	2.6	1.687	0.966	0.533	0.306	18	4.23	0.001
1997	ear weight (g)	PH3PG	PHKM5	10	10	82.7	51.7	31.0	13.284	8.028	4.201	2.539	18	6.32	0.000
1998	ear weight (g)	PH3PG	PHKM5	10	10	66.0	41.8	24.2	14.119	10.207	4.465	3.228	18	4.39	0.000
1999	ear weight (g)	PH3PG	PHKM5	10	10	63.5	45.0	18.5	8.423	6.110	2.664	1.932	18	5.62	0.000

Summary data across years

Traits	Variety-1	Variety-2	Count-1	Count-2	Mean-1	Mean-2	Mean Diff	StdDeviation-1	StdDeviation-2	StdError-1	StdError-2	DF Pooled	t-Value Pooled	Prob (2-tail) Pooled
cob diameter (mm)	PH3PG	PHKM5	30	30	18.2	15.1	3.2	1.612	1.437	0.294	0.262	58	8.03	0.000
ear row number	PH3PG	PHKM5	30	30	15.0	12.3	2.7	1.640	1.461	0.299	0.267	58	6.82	0.000
ear weight (g)	PH3PG	PHKM5	30	30	70.7	46.2	24.6	14.622	9.029	2.670	1.648	58	7.83	0.000

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Table 2. These data indicate differences between varieties PH3PG and PHKM5. Data are from multiple locations and years grown primarily in the adapted growing area

Variety 1 = PH3PG
Variety 2 = PHKM5

Variety 1	PH3PG		
Variety 2	PHKM5		
		GDU	PLT
	VAR	SLK	HT
YEAR	#	ABS	ABS
---	---	---	CM
1996	1	1104	194.1
	2	1138	164.6
	LOCS	17	5
	PROB	.063*	.027+
1997	1	1098	191.0
	2	1161	170.7
	LOCS	29	16
	PROB	.000#	.000#
1998	1	1103	181.4
	2	1139	161.8
	LOCS	24	9
	PROB	.001#	.001#
1999	1	1081	182.6
	2	1156	163.3
	LOCS	14	15
	PROB	.000#	.000#
TOTAL SUM	1	1098	186.7
	2	1149	165.9
	LOCS	84	45
	DIFF	51	20.8
T-TEST	PROB	.000#	.000#

DEFINITIONS

In the description and examples, a number of terms are used herein. In order to provide a clear and consistent understanding of the specification and claims, including the scope to be given such terms, the following definitions are provided:

ANT ROT = **ANTHRACNOSE STALK ROT** (*Colletotrichum graminicola*).
A 1 to 9 visual rating indicating the resistance to Anthracnose Stalk Rot. A higher score indicates a higher resistance.

BAR PLT = **BARREN PLANTS.**
The percent of plants per plot that were not barren (lack ears).

BRT STK = **BRITTLE STALKS.**
This is a measure of the stalk breakage near the time of pollination, and is an indication of whether a hybrid or inbred would snap or break near the time of flowering under severe winds. Data are presented as percentage of plants that did not snap.

BU ACR = **YIELD (BUSHELS/ACRE).**
Yield of the grain at harvest in bushels per acre adjusted to 15.5% moisture.

CLD TST = **COLD TEST.**
The percent of plants that germinate under cold test conditions.

CLN = **CORN LETHAL NECROSIS.**
Synergistic interaction of maize chlorotic mottle virus (MCMV) in combination with either maize dwarf mosaic virus (MDMV-A or MDMV-B) or wheat streak mosaic virus (WSMV). A 1 to 9 visual rating indicating the resistance to Corn Lethal Necrosis. A higher score indicates a higher resistance.

COM RST = **COMMON RUST** (*Puccinia sorghi*).
A 1 to 9 visual rating indicating the resistance to Common Rust. A higher score indicates a higher resistance.

DIP ERS = **DIPLODIA EAR MOLD SCORES** (*Diplodia maydis and Diplodia macrospora*).
A 1 to 9 visual rating indicating the resistance to Diplodia Ear Mold. A higher score indicates a higher resistance.

DRP EAR = **DROPPED EARS.**
A measure of the number of dropped ears per plot and represents the percentage of plants that did not drop ears prior to harvest.

EAR HT = **EAR HEIGHT.**
The ear height is a measure from the ground to the highest placed developed ear node attachment and is measured in cm.

EAR MLD = **GENERAL EAR MOLD.**
Visual rating (1-9 score) where a "1" is very susceptible and a "9" is very resistant. This is based on overall rating for ear mold of mature ears without determining the specific mold organism, and may not be predictive for a specific ear mold.

EAR SZ = **EAR SIZE.**
A 1 to 9 visual rating of ear size. The higher the rating the larger the ear size.

ECB 1LF = **EUROPEAN CORN BORER FIRST GENERATION LEAF FEEDING** (*Ostrinia nubilalis*).
A 1 to 9 visual rating indicating the resistance to preflowering leaf feeding by first generation European Corn Borer. A higher score indicates a higher resistance.

ECB 2IT = **EUROPEAN CORN BORER SECOND GENERATION INCHES OF TUNNELING** (*Ostrinia nubilalis*).

Average inches of tunneling per plant in the stalk.

ECB 2SC = **EUROPEAN CORN BORER SECOND GENERATION** (*Ostrinia nubilalis*).
A 1 to 9 visual rating indicating post flowering degree of stalk breakage and other evidence of feeding by European Corn Borer, Second Generation. A higher score indicates a higher resistance.

ECB DPE = **EUROPEAN CORN BORER DROPPED EARS** (*Ostrinia nubilalis*).
Dropped ears due to European Corn Borer. Percentage of plants that did not drop ears under second generation corn borer infestation.

EGRWTH = **EARLY GROWTH.**
This is the visual rating (1 to 9) of the amount of vegetative growth after emergence at the seedling stage (approximately five leaves). A higher score indicates better vigor or early season growth.

EST CNT = **EARLY STAND COUNT.**
This is a measure of the stand establishment in the spring and represents the number of plants that emerge on per plot basis for the inbred or hybrid.

EYE SPT = **EYE SPOT** (*Kabatiella zeae or Aureobasidium zeae*).
A 1 to 9 visual rating indicating the resistance to Eye Spot. A higher score indicates a higher resistance.

FUS ERS = **FUSARIUM EAR ROT SCORE.** (*Fusarium moniliforme or Fusarium subglutinans*).
A 1 to 9 visual rating indicating the resistance to Fusarium ear rot. A higher score indicates a higher resistance.

GDU = **GROWING DEGREE UNITS.**
Using the Barger Heat Unit Theory, which assumes that maize growth occurs in the temperature range 50°F - 86°F and that temperatures outside this range slow down growth; the maximum daily heat unit accumulation is 36 and the minimum daily heat unit accumulation is 0. The seasonal accumulation of GDU is a major factor in determining maturity zones.

GDU SHD = **GDU TO SHED.**
The number of growing degree units (GDUs) or heat units required for an inbred line or hybrid to have approximately 50 percent of the plants shedding pollen and is measured from the time of planting. Growing degree units are calculated by the Barger Method, where the heat units for a 24-hour period are:

$$GDU = \frac{(Max.\ Temp. + Min.\ temp.)}{} - 50/2$$

The highest maximum temperature used is 86° F. and the lowest minimum temperature used is 50°F. For each inbred or hybrid it takes a certain number of GDUs to reach various stages of plant development.

GDU SLK = **GDU TO SILK.**
The number of growing degree units required for an inbred line or hybrid to have approximately 50 percent of the plants with silk emergence from time of planting. Growing degree units are calculated by the Barger Method as given in GDU SHD definition.

GIBERS = **GIBBERELLA EAR ROT (PINK MOLD)** (*Gibberella zeae*).
A 1 to 9 visual rating indicating the resistance to Gibberella Ear Rot. A higher score indicates a higher resistance.

GLF SPT = **GRAY LEAF SPOT** (*Cercospora zeae-maydis*).
A 1 to 9 visual rating indicating the resistance to Gray Leaf Spot. A higher score indicates a higher resistance.

GOS WLT = **GOSS' WILT** (*Corynebacterium nebraskense*).
A 1 to 9 visual rating indicating the resistance to Goss' Wilt. A higher score indicates a higher resistance.

GRN APP = **GRAIN APPEARANCE.**
This is a 1 to 9 rating for the general appearance of the shelled grain as it is harvested based on such factors as the color of harvested grain, any mold on the grain, and any cracked grain. High scores indicate good grain quality.

HC BLT = **HELMINTHOSPORIUM CARBONUM LEAF BLIGHT** (*Helminthosporium carbonum*).
A 1 to 9 visual rating indicating the resistance to Helminthosporium infection. A higher score indicates a higher resistance.

HD SMT = **HEAD SMUT** (*Sphacelotheca reiliana*).
This score indicates the percentage of plants not infected.

KER KG = **KERNELS PER KILOGRAM.**
The number of kernels per 1 kilogram of seed after discard is removed.

KSZ DCD = **KERNEL SIZE DISCARD.**
The percent of discard seed; calculated as the sum of discarded tip kernels and extra large kernels.

MDM CPX = **MAIZE DWARF MOSAIC COMPLEX** (MDMV = Maize Dwarf Mosaic Virus and MCDV = Maize Chlorotic Dwarf Virus).
A 1 to 9 visual rating indicating the resistance to Maize Dwarf Mosaic Complex. A higher score indicates a higher resistance.

MST = **HARVEST MOISTURE.**
The moisture is the actual percentage moisture of the grain at harvest.

NLF BLT = **NORTHERN LEAF BLIGHT** (*Helminthosporium turcicum* or *Exserohilum turcicum*).
A 1 to 9 visual rating indicating the resistance to Northern Leaf Blight. A higher score indicates a higher resistance.

PLT HT = **PLANT HEIGHT.**
This is a measure of the height of the plant from the ground to the tip of the tassel in cm.

POL SC = **POLLEN SCORE.**
A 1 to 9 visual rating indicating the amount of pollen shed. The higher the score the more pollen shed.

POL WT = **POLLEN WEIGHT.**
This is calculated by dry weight of tassels collected as shedding commences minus dry weight from similar tassels harvested after shedding is complete.

PRM = **PREDICTED RELATIVE MATURITY.**
This trait, predicted relative maturity, is based on the harvest moisture of the grain. The relative maturity rating is based on a known set of checks and utilizes standard linear regression analyses and is also referred to as the Comparative Relative Maturity Rating System that is similar to the Minnesota Relative Maturity Rating System.

PRM SHD = **PREDICTED RELATIVE MATURITY GDU TO SHED.**
A relative measure of the growing degree units (GDU) required to reach 50% pollen shed. Relative values are predicted values from the linear regression of observed GDU's on relative maturity of commercial checks.

RT LDG = **ROOT LODGING.**
Root lodging is the percentage of plants that do not root lodge; plants that lean from the vertical axis at an approximately 30° angle or greater would be counted as root lodged.

SCT GRN = **SCATTER GRAIN.**
A 1 to 9 visual rating indicating the amount of scatter grain (lack of pollination or kernel abortion) on the ear. The higher the score the less scatter grain.

SEL IND = **SELECTION INDEX.**
The selection index gives a single measure of the hybrid's worth based on information for up to five traits. A maize breeder may utilize his or her own set of traits for the selection index. One of the traits that is almost always included is yield. When selection index data is presented, the tables represent the mean value averaged across testing stations.

SLF BLT = **SOUTHERN LEAF BLIGHT** (*Helminthosporium maydis* or *Bipolaris maydis*).
A 1 to 9 visual rating indicating the resistance to Southern Leaf Blight. A higher score indicates a higher resistance.

SOU RST = **SOUTHERN RUST** (*Puccinia polysora*).
A 1 to 9 visual rating indicating the resistance to Southern Rust. A higher score indicates a higher resistance.

STAGRN = **STAYGREEN.**
Staygreen is the measure of plant health near the time of black layer formation (physiological maturity). A high score indicates better late-season plant health.

STK CNT = **NUMBER OF PLANTS.**
This is the final stand or number of plants per plot.

STK LDG. = **STALK LODGING.**
This is the percentage of plants that did not stalk lodge (stalk breakage) as measured by either natural lodging or pushing the stalks and determining the percentage of plants that break below the ear.

STW WLT = **STEWART'S WILT** (*Erwinia stewartii*).
A 1 to 9 visual rating indicating the resistance to Stewart's Wilt. A higher score indicates a higher resistance.

TASBRN = **TASSEL BRANCHES.**
This is the number of primary tassel branches.

TAS SZ = **TASSEL SIZE.**
A 1 to 9 visual rating was used to indicate the relative size of the tassel. The higher the rating the larger the tassel.

TAS WT = **TASSEL WEIGHT.**
This is the average weight of a tassel (grams) just prior to pollen shed.

TEX EAR = **EAR TEXTURE.**
A 1 to 9 visual rating was used to indicate the relative hardness (smoothness of crown) of mature grain. A 1 would be very soft (extreme dent) while a 9 would be very hard (flinty or very smooth crown).

TILLER = **TILLERS.**
A count of the number of tillers per plot that could possibly shed pollen was taken. Data are given as a percentage of tillers: number of tillers per plot divided by number of plants per plot.

TST WT = **TEST WEIGHT (UNADJUSTED).**
The measure of the weight of the grain in pounds for a given volume (bushel).

YLD SC = **YIELD SCORE.**
A 1 to 9 visual rating was used to give a relative rating for yield based on plot ear piles. The higher the rating the greater visual yield appearance.

200000250

United States Department of Agriculture, Agricultural Marketing Service
Science Division, Plant Variety Protection Office
National Agricultural Library Building, Room 500
Beltsville, MD 20705

Objective Description of Variety
Corn (Zea mays L.)

Name of Applicant (s)	Variety Seed Source	Variety Name or Temporary Designation
Pioneer Hi-Bred International, Inc.		PH3PG
Address (Street & No., or RFD No., City, State, Zip Code and Country		FOR OFFICIAL USE
7301 NW 62nd Avenue, P.O. Box 85, Johnston, Iowa 50131-0085		PVP0 Number

Place the appropriate number that describes the varietal characters typical of this inbred variety in the spaces below. Right justify whole numbers by adding Leading zeroes if necessary. Completeness should be striven for to establish an adequate variety description. Traits designated by an '*' are considered Necessary for an adequate variety description and must be completed.

COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices: describe #25 and #26 in Comments section):

01=Light Green	06=Pale Yellow	11=Pink	16=Pale Purple	21=Buff
02=Medium Green	07=Yellow	12=Light Red	17=Purple	22=Tan
03=Dark Green	08=Yellow Orange	13=Cherry Red	18=Colorless	23=Brown
04=Very Dark Green	09=Salmon	14=Red	19=White	24=Bronze
05=Green-Yellow	10=Pink-Orange	15=Red & White	20=White Capped	25=Variegated (Describe)
				26=Other (Describe)

STANDARD INBRED CHOICES
(Use the most similar (in background and maturity) of these to make comparisons based on **grow-out trial data**):

Yellow Dent Families:		Yellow Dent (Unrelated):	Sweet Corn:
Family	Members	Co109, ND246,	C13, Iowa5125, P39, 2132
B14	CM105, A632, B64, B68	Oh7, T232,	
B37	B37, B76, H84	W117, W153R,	Popcorn:
B73	N192, A679, B73, NC268	W18BN	SG1533, 4722, HP301, HP7211
C103	Mo17, Va102, Va35, A682		
Oh43	A619, MS71, H99, Va26	White Dent:	Pipecorn:
WF9	W64A, A554, A654, Pa91	C166, H105, Ky228	Mo15W, Mo16W, Mo24W

Groups on Lynx/Osborn/Grunst/98-99PVP

EXHIBIT C: PH3PG

1. TYPE: (describe intermediate types in Comments section):	Standard Variety Name
2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental (DENT LIKE)	A554
2. REGION WHERE DEVELOPED IN THE U.S.A.: 2 1=Northwest 2=Northcentral 3=Northeast 4=Southeast 5=Southcentral 6=Southwest 7=Other	Standard Seed Source AMES 19305

3. MATURITY (In Region of Best Adaptability; show Heat Unit formula in 'Comments' section)

DAYS	HEAT UNITS		DAYS	HEAT UNITS
060	1,034.3	From emergence to 50% of plants in silk	066	1,192.0
061	1,052.6	From emergence to 50% of plants in pollen	066	1,192.4
003	0,068.4	From 10% to 90% pollen shed	003	0,084.4
		From 50% silk to optimum edible quality		
		From 50% silk to harvest at 25% moisture	075	1,609.8

4. PLANT:

		Standard Deviation	Sample Size		Standard Deviation	Sample Size
174.4	cm Plant Height (to tassel tip)	21.23	08	167.6	09.52	08
062.4	cm Ear Height (to base of top ear node)	13.10	08	050.9	11.31	08
013.8	cm Length of Top Ear Internode	01.27	07	013.3	02.75	08
0.1	Average Number of Tillers	00.20	08	0.0	00.02	08
1.0	Average Number of Ears per Stalk	00.07	08	1.1	00.36	08
4	Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Moderate 4=Dark			3		

5. LEAF:

		Standard Deviation	Sample Size		Standard Deviation	Sample Size
07.2	cm Width of Ear Node Leaf	00.71	07	08.8	00.49	08
70.4	cm Length of Ear Node Leaf	06.47	07	62.4	06.58	08
04	Number of leaves above top ear	00.38	07	05	00.35	08
36	Degrees Leaf Angle (measure from 2nd leaf above ear at anthesis to stalk above leaf)	18.10	07	31	13.00	08
03	Leaf Color (Munsell code) 5GY34			03	5GY44	
1	Leaf Sheath Pubescence (Rate on scale from 1=none to 9=like peach fuzz)			1		
6	Marginal Waves (Rate on scale from 1=none to 9=many)			6		
6	Longitudinal Creases (Rate on scale from 1=none to 9=many)			7		

6. TASSEL:

		Standard Deviation	Sample Size		Standard Deviation	Sample Size
04	Number of Primary Lateral Branches	01.44	07	11	01.98	08
18	Branch Angle from Central Spike	06.64	07	20	06.51	08
50.9	cm Tassel Length (from top leaf collar to tassel tip)	04.73	07	47.4	01.99	08
5	Pollen Shed (rate on scale from 0=male sterile to 9=heavy shed)			7		
11	Anther Color (Munsell code) 10RP46			07	5Y88	
01	Glume Color (Munsell code) 7.5GY68			01	5GY66	
1	Bar Glumes (Glume Bands): 1=Absent 2=Present			1		

Application Variety Data	PH3PG	Page 2	Standard Variety Data

7a. EAR (Unhusked Data):			
14	Silk Color (3 days after emergence) (Munsell code)	10RP310	07 2.5GY96
03	Fresh Husk Color (25 days after 50% silking) (Munsell code)	5GY56	01 5GY78
21	Dry Husk Color (65 days after 50% silking) (Munsell code)	5Y8.52	21 2.5Y8.54
1	Position of Ear at Dry Husk Stage: 1= Upright 2= Horizontal 3= Pendant		3
7	Husk Tightness (Rate of Scale from 1=very loose to 9=very tight)		7
2	Husk Extension (at harvest): 1=Short (ears exposed) 2=Medium (<8 cm) 3=Long (8-10 cm beyond ear tip) 4=Very Long (>10 cm)		2

7b. EAR (Husked Ear Data):		Standard Deviation	Sample Size	Standard Deviation	Sample Size
11.9	cm Ear Length	00.38	07	09.5 00.93	08
34.6	mm Ear Diameter at mid-point	00.98	07	39.8 00.71	08
068.9	gm Ear Weight	10.49	08	65.5 06.00	08
15	Number of Kernel Rows	00.82	07	13.4 00.74	08
2	Kernel Rows: 1=Indistinct 2=Distinct			2	
2	Row Alignment: 1=Straight 2=Slightly Curved 3=Spiral			1	
10.4	cm Shank Length	01.62	07	11.3 02.19	08
2	Ear Taper: 1=Slight 2= Average 3=Extreme			2	

8. KERNEL (Dried)		Standard Deviation	Sample Size	Standard Deviation	Sample Size
09.3	mm Kernel Length	00.49	07	10.1 00.64	08
07.0	mm Kernel Width	00.58	07	08.1 00.35	08
04.7	mm Kernel Thickness	00.76	07	04.4 00.52	08
31.9	% Round Kernels (Shape Grade)	15.36	07	27.3 08.94	08
1	Aleurone Color Pattern: 1-Homozygous 2=Segregating			1	
07	Aluerone Color (Munsell code)	10YR714		07 2.5Y812	
07	Hard Endosperm Color (Munsell code)	10YR712		07 2.5Y812	
03	Endosperm Type: 1=Sweet (Su1) 2=Extra Sweet (sh2) 3=Normal Starch 4=High Amylose Starch 5=Waxy Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 9=High Oil 10=Other___			3	
20.7	gm Weight per 100 Kernels (unsized sample)	01.25	07	22.13 01.96	08

9. COB:			Standard Deviation	Sample Size	Standard Deviation	Sample Size
18.0	mm Cob Diameter at mid-point		01.29	07	23.4 01.06	08
19	Cob Color (Munsell code)	5Y91			14 10R48	

10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested; leave Race or Strain Options blank if polygenic):		
A. Leaf Blights, Wilts, and Local Infection Diseases		
	Anthracnose Leaf Blight (Colletotrichum graminicola)	
5	Common Rust (Puccinia sorghi)	6
	Common Smut (Ustilago maydis)	
5	Eyespot (Kabatiella zeae)	1
6	Goss's Wilt (Clavibacter michiganense spp. nebraskense)	6
	Gray Leaf Spot (Cercospora zeae-maydis)	
	Helminthosporium Leaf Spot (Bipolaris zeicola) Race ———	
3	Northern Leaf Blight (Exserohilum turcicum) Race ———	2
	Southern Leaf Blight (Bipolaris maydis) Race ———	
	Southern Rust (Puccinia polysora)	
6	Stewart's Wilt (Erwinia stewartii)	4
	Other (Specify) ———	
B. Systemic Diseases		
	Corn Lethal Necrosis (MCMV and MDMV)	
7	Head Smut (Sphacelotheca reiliana)	7
	Maize Chlorotic Dwarf Virus (MDV)	
	Maize Chlorotic Mottle Virus (MCMV)	
	Maize Dwarf Mosaic Virus (MDMV)	
	Sorghum Downy Mildew of Corn (Peronosclerospora sorghi)	
	Other (Specify) ———	
C. Stalk Rots		
	Anthracnose Stalk Rot (Colletotrichum graminicola)	
	Diplodia Stalk Rot (Stenocarpella maydis)	
	Fusarium Stalk Rot (Fusarium moniliforme)	
	Gibberella Stalk Rot (Gibberella zeae)	
	Other (Specify) ———	
D. Ear and Kernel Rots		
	Aspergillus Ear and Kernel Rot (Aspergillus flavus)	
	Diplodia Ear Rot (Stenocarpella maydis)	
	Fusarium Ear and Kernel Rot (Fusarium moniliforme)	
5	Gibberella Ear Rot (Gibberella zeae)	4
	Other (Specify) ———	

11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); (leave blank if not tested) :

Banks grass Mite (Oligonychus pratensis)	
Corn Worm (Helicoverpa zea)	
Leaf Feeding	
Silk Feeding	
mg larval wt.	
Ear Damage	
Corn Leaf Aphid (Rhopalosiphum maidis)	
Corn Sap Beetle (Carpophilus dimidiatus	
European Corn Borer (Ostrinia nubilalis)	
1st Generation (Typically Whorl Leaf Feeding)	
2nd Generation (Typically Leaf Sheath-Collar Feeding)	
Stalk Tunneling	
cm tunneled/plant	
Fall Armyworm (Spodoptera fruqiperda)	
Leaf Feeding	
Silk Feeding	
mg larval wt.	
Maize Weevil (Sitophilus zeamaize	
Northern Rootworm (Diabrotica barberi)	
Southern Rootworm (Diabrotica undecimpunctata)	
Southwestern Corn Borer (Diatreaea grandiosella)	
Leaf Feeding	
Stalk Tunneling	
cm tunneled/plant	
Two-spotted Spider Mite (Tetranychus urticae)	
Western Rootworm (Diabrotica virgifrea virgifera)	
Other (Specify) ——	

12. AGRONOMIC TRAITS:

2	Staygreen (at 65 days after anthesis) (Rate on a scale from 1=worst to excellent)	2
0.0	% Dropped Ears (at 65 days after anthesis)	0.0
	% Pre-anthesis Brittle Snapping	
	% Pre-anthesis Root Lodging	
4.1	Post-anthesis Root Lodging (at 65 days after anthesis)	27.4
3,366.9	Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)	2,609.7

13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but not supplied; 2=data supplied):

1 Isozymes 0 RFLP's 0 RAPD's

COMMENTS (eg. state how heat units were calculated, standard inbred seed source, and/or where data was collected. Continue in Exhibit D):

CLARIFICATION OF DATA IN EXHIBITS B AND C

Please note the data presented in Exhibit C, "Objective Description of Variety," are collected primarily at Johnston and Ankeny, Iowa. The data in Exhibit B are from comparisons of inbreds grown in the same tests in the adapted growing area of PH3PG and in Johnston and Ankeny, IA. The data in Tables 1A and 1B are from paired comparisons collected in Johnston and Ankeny, IA. The data in Table 2 are from paired comparisons grown primarily in the adapted growing area of PH3PG. These traits collectively show distinct differences between the two varieties.

JMS 12/13/01

The data collected in exhibit C were collected from environments in 1997, 1998 and 1999 for page 1 and 2. There are factors that differ from environment to environment. The environments had different planting dates. Environmental temperature and precipitation differences during the vegetative and grain fill periods can impact plant and grain traits and be a source of variability. These data are mostly based on 5 plants measured at each location. There often is more variability associated with year to year or environment to environment factors than within locations. Please see Table 3 for average temperature and rainfall information in 1997, 1998, and 1999.

Table 3. Temperature and Rainfall

TEMPERATURE

YEAR	MAY	JUN	JULY	AUG	AVERAGE
1994	59.8	70.7	71.9	69.0	**67.9**
1995	56.2	69.4	74.3	76.9	**69.2**
1996	56.2	69.3	71.3	70.5	**66.8**
1997	53.5	70.6	74.1	69.6	**67.0**
1998	64.7	66.6	74.8	73.5	**69.9**
1999	60.7	69.7	78.7	70.5	**69.9**

RAINFALL

YEAR	MAY	JUN	JULY	AUG	Total
1994	3.67	5.75	1.71	4.18	**15.31**
1995	5.04	4.19	2.94	2.87	**15.04**
1996	8.47	4.35	2.51	2.14	**17.47**
1997	4.32	3.27	4.10	1.36	**13.05**
1998	6.46	11.07	5.70	4.96	**28.19**
1999	6.46	4.54	4.45	6.55	**21.85**

200000250

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U. S. C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
PIONEER HI-BRED INTERNATIONAL, INC.		**PH3PG**

4 .ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	5. TELEPHONE *(include area code)*	6. FAX *(include area code)*
7301 NW 62nd AVENUE **P.O.BOX 85** **JOHNSTON, IA 50131-0085**	**515-270-4051**	**515-253-2125**
	7. PVPO NUMBER	

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block.* ***If no, please explain:*** ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? ☒ YES ☐ NO

If no, give name of country

10. Is the applicant the original owner? ☒ YES ☐ NO ***If no, please answer one of the following:***

a. If original rights to variety were owned by individual(s), is(are) the original owner(s) a U.S. national(s)?

☐ YES ☐ NO ***if no, give name of country***

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?

☒ YES ☐ NO ***If no, give name of country***

11. Additional explanation on ownership *(if needed, use reverse for extra space)*:

PH3PG is owned by Pioneer Hi-Bred International, Inc.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country Which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See section 41(a)(2) of the Plant Variety Protection Act for definition.